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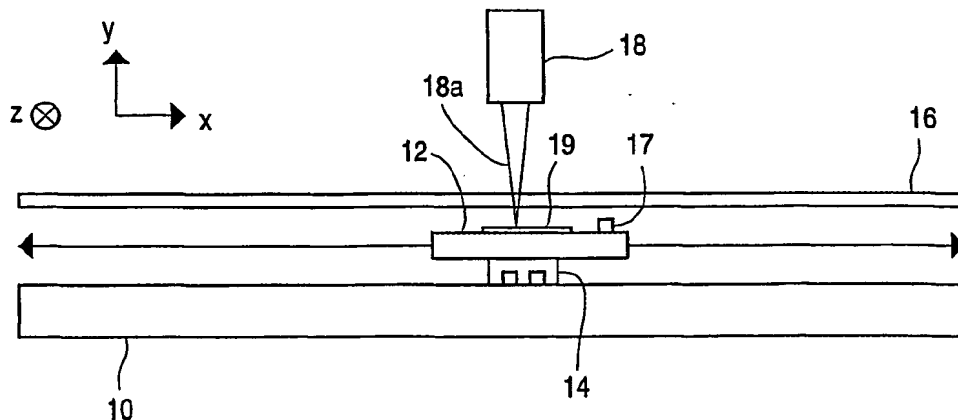
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(54) Title: APPARATUS FOR PROCESSING AN OBJECT WITH HIGH POSITION ACCURACY



(57) Abstract: A apparatus processes an object (19), such as a semi-conductor wafer at accurately controlled positions. The object (19) is supported by a working platform (12) that is moveable along a path. A suspension actuator part (14) attached to the working platform (12), contains a soft magnetic core (24) with poles facing the surface of a soft magnetic element (34) on the support structure along the path and a winding (20) for application of a current to generate a magnetic field that runs through the core (24) via the poles and returns via the soft magnetic element (34). A sensor (17) senses a measured position of the suspension actuator part (14) relative to the position reference element (16). A control circuit comprises an outer control circuit (40) and an inner control circuit (42). The outer control circuit (40) receives a sensing result and determines force set point information to regulate the measured position of the actuator part (14) to a required value. The inner control circuit (42) receives the force set point information and controls the current to realize a force between the actuator part (14) and the support structure (10) according to the force set point information.

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